

Title (en)

Magneto-optical recording medium and method of reproducing information from the same

Title (de)

Magneto-optisches Aufzeichnungsmedium und Verfahren zur Informationswiedergabe

Title (fr)

Milieu d'enregistrement magnéto-optique et méthode de reproduction d'information

Publication

EP 0821354 A3 20000809 (EN)

Application

EP 97305512 A 19970723

Priority

JP 19314096 A 19960723

Abstract (en)

[origin: EP0821354A2] A magneto-optical recording medium of the present invention has a recording layer made of a perpendicular magnetization film, and a readout layer which is in an in-plane magnetization state at room temperature and changes into a perpendicular magnetization state with a rise in temperature. When the magneto-optical recording medium is irradiated with a light beam, the readout layer separates into three regions: a region in an in-plane magnetization state, a region in a perpendicular magnetization state, and a region having a temperature not lower than the Curie temperature thereof. Only the region in the perpendicular magnetization state allows copying of the magnetization of the recording layer. Therefore, even when the diameter and intervals of recording bits on the recording layer are very small, it is possible to reproduce a target recording bit separately from a recording bit adjacent to the target recording bit. <IMAGE> <IMAGE>

IPC 1-7

G11B 11/10

IPC 8 full level

G11B 11/10 (2006.01); **G11B 11/105** (2006.01)

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G11B 11/10504 (2013.01 - KR); **G11B 11/10515** (2013.01 - EP KR US); **G11B 11/10584** (2013.01 - EP KR US);
G11B 11/10586 (2013.01 - EP US); **G11B 11/10591** (2013.01 - KR)

Citation (search report)

- [DXY] EP 0596716 A2 19940511 - SHARP KK [JP]
- [Y] DE 19506374 A1 19950907 - SHARP KK [JP]
- [X] DE 19536796 A1 19960425 - SHARP KK [JP]
- [E] EP 0810594 A2 19971203 - SHARP KK [JP]
- [A] EP 0586175 A1 19940309 - CANON KK [JP]
- [A] EP 0673026 A2 19950920 - CANON KK [JP]
- [A] JP H0877626 A 19960322 - FUJITSU LTD [JP] & US 5627777 A 19970506 - TAMANOI KEN [JP], et al
- [E] EP 0915462 A1 19990512 - HITACHI MAXELL [JP], et al
- [A] SHUNJI YOSHIMURA ET AL: "LARGE-CAPACITY MAGNETO-OPTICAL DISK SYSTEM USING MAGNETICALLY INDUCED SUPER RESOLUTION", IEEE TRANSACTIONS ON CONSUMER ELECTRONICS, vol. 38, no. 3, 1 August 1992 (1992-08-01), pages 660 - 664, XP000311908
- [A] MASAHIKO KANEKO ET AL: "MULTILAYERED MAGNETO-OPTICAL DISKS FOR MAGNETICALLY INDUCED SUPERRESOLUTION", JAPANESE JOURNAL OF APPLIED PHYSICS, vol. 31, no. 2B, 1 February 1992 (1992-02-01), pages 568 - 575, XP000323484
- [A] NISHIMURA ET AL.: "Magnetostatic Coupling MSR with In-Plane Magnetisation Films", JAPANESE JOURNAL OF APPLIED PHYSICS., vol. 35, no. 1B, January 1996 (1996-01-01), TOKYO JP, pages 403 - 409, XP002066758
- [A] TAMANOI K ET AL: "MAGNETICALLY-INDUCED SUPER RESOLUTION USING MAGNETO-STATIC COUPLING", NIHON OYO JIKI GAKKAISHI - JOURNAL OF THE MAGNETIC SOCIETY OF JAPAN, 27 September 1995 (1995-09-27), XP002063556
- [A] HIROKANE J ET AL: "MAGNETICALLY INDUCED SUPERRESOLUTION USING DOMAIN STABILITY", JAPANESE JOURNAL OF APPLIED PHYSICS,JP,PUBLICATION OFFICE JAPANESE JOURNAL OF APPLIED PHYSICS. TOKYO, vol. 35, no. 1B, 1 January 1996 (1996-01-01), pages 415 - 418, XP000729844, ISSN: 0021-4922

Cited by

EP0965987A3; EP1260976A3; US6042954A; EP0803870A3; US6821642B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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